

CLAIMS

1. An organic emulsion-breaking formulation, characterized in that it comprises:

- as the emulsion-breaking agent, at least one constituent selected from non-ionic amphiphilic compositions obtained by reacting at least one polymerized vegetable oil with at least one amino-alcohol, and alkyl esters of fatty acids derived from natural, vegetable or animal oils;
- optionally, at least one wetting agent selected from anionic surfactants;
- and optionally, at least one solvent;

the assembly being as a mixture in an organic base.

2. A formulation according to claim 1, characterized in that:

- said emulsion-breaking agent is present in a proportion of 0.5% to 100% by weight of pure surfactant; and
- said wetting agent is present in a proportion of up to 50% by weight of pure surfactant;
- said solvent is present in a proportion of up to 99.5% by weight;

the ensemble having a concentration of pure active matter of 0.01 to 50 g per 100 ml of said organic base.

3. A formulation according to claim 1 or claim 2, characterized in that said emulsion-breaking agent comprises at least one non-ionic amphiphilic composition obtained by reacting polymerized linseed oil with diethanolamine.

4. A formulation according to any one of claims 1 to 3, characterized in that said emulsion-breaking agent comprises at least a mixture of methyl esters of rapeseed oil.

5. A formulation according to any one of claims 1 to 4, characterized in that said wetting agent is a sodium dialkyl sulfosuccinate.
6. A formulation according to any one of claims 1 to 5, characterized in that said solvent is selected from petroleum cuts, alcohols and hydroalcoholic mixtures,
5 alkyl esters of long chain carboxylic acids and compositions of alkyl esters of fatty acids derived from vegetable oils.
7. A formula according to any one of claims 1 to 6, characterized in that said solvent is a mixture of methyl esters of rapeseed oil.
8. A formula according to any one of claims 1 to 7, characterized in that said organic
10 base is a mineral oil or an oil of vegetable origin.
9. A formulation according to claim 8, characterized in that said organic base is non-polluting.
10. A formulation according to claim 8 or claim 9, characterized in that said oil of vegetable origin is a mixture of methyl esters of rapeseed oil.
- 15 11. A formulation according to any one of claims 1 to 10, characterized in that, when the formulation is used to treat well bores drilled in oil-base mud, the organic base of said formulation is an oil identical to that of the mud.
12. A formulation according to any one of claims 1 to 11, characterized in that it
20 further comprises 1% to 10% by weight with respect to the organic base of at least one viscosifying agent for the organic medium and a quantity, determined according to the specific density required for the fluid, of at least one weighting agent.

13. A formulation according to claim 12, characterized in that the viscosifying agent is selected from organosoluble acrylic resins that are cross-linked to a greater or lesser extent.
14. A formulation according to claim 12 or claim 13, characterized in that said
5 weighting agent is selected from calcium carbonates of different grain sizes.
15. A formulation according to any one of claims 12 to 14, characterized in that it further comprises up to 5%, preferably up to 2% with respect to the organic base, of at least one dispersing agent.
16. A formulation according to claim 15, characterized in that said dispersing agent is
10 selected from hydroxy-functionalized carboxylic acid esters the functional groups of which have affinities with the pigments used in paint formulations.
17. Use of an emulsion-breaking formulation in an organic base according to any one of claims 1 to 16, for the treatment of a well bore drilled in an oil-base mud.
18. The use of an emulsion-breaking formulation in an organic base according to any
15 one of claims 12 to 16 in any well phase that requires a fluid having the same density as the mud used to drill the well bore.